

Input Set: I692401.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

1 <110> APPLICANT: Heidecker, Leonora
2 van den Eynde, Benot
3 Boon-Falleur, Thierry
4 Brasseur, Francis
5 <120> TITLE OF INVENTION: MAGE-A12 ANTIGENIC PEPTIDES AND USES THEREOF
6 <130> FILE REFERENCE: L0461/7097
7 <140> CURRENT APPLICATION NUMBER: US/09/692,401
8 <141> CURRENT FILING DATE: 2000-10-19
9 <150> EARLIER APPLICATION NUMBER: US 60/160,374
10 <151> EARLIER FILING DATE: 1999-10-19
11 <150> EARLIER APPLICATION NUMBER: US 60/179,570
12 <151> EARLIER FILING DATE: 2000-02-01
13 <160> NUMBER OF SEQ ID NOS: 56
14 <170> SOFTWARE: FastSEQ for Windows Version 3.0
15 <210> SEQ ID NO 1
16 <211> LENGTH: 4523
17 <212> TYPE: DNA
18 <213> ORGANISM: Homo sapiens
19 <220> FEATURE:
20 <221> NAME/KEY: CDS
21 <222> LOCATION: (2960)...(3904)
22 <400> SEQUENCE: 1
23 tggcctggga cccgcagcca ttctctacaa ggggtgcagc tgtgcaaagt cacagacgtt 60
24 acagaaacag agtatctcct gccaatcact tcatccaaca gccaggagtg aggaagagga 120
25 ccctcttgag tgaggactga ggggtccacc tccccacgt agtgaccaca gaatccagct 180
26 cagtccctct tgtcagccct gctaaactta ggcaataatg tcaccccgac cgcacccctc 240
27 cccagtgcc acttcagggg gactcagagt cagagacttg gtctgagggg agcagacaca 300
28 atcggcagag gatggcggtc caggctcagc ctggcatcca agtcaggacc ttgagggatg 360
29 accaaaggcc cctcccacc ccaactcccc caaccccacc aggatctaca gcctcatgat 420
30 ccccgctcct atccctacc ctacccccaa caccatcttc atcgttacct ccacctccat 480
31 ctggatcccc atccaggaag aatccagttc caccctgtgt gtgaacccag ggaagtcacg 540
32 gggccggatg tgacgccact gacttgcgcg ttggagggtca gagaacagcg agattctcgc 600
33 cctgagcaac ggcctgacgt cggcggaggg aagcaggcgc aggctccgtg aggaggcaag 660
34 gtaagatgcc gagggaggac tgaggcgggc ctcacccag acagagggcc cccaataatc 720
35 cagcgtgcc tctgctgcca ggcctggacc accctgcagg ggaagacttc tcaggctcag 780
36 tcgccaccac ctcacccgc cccccccgc cgctttaacc gcagggaact ctggtgtaag 840
37 agctttgtgt gaccagggca gggctggtta gaagtgtca gggcccagac tcagccagga 900
38 atcaagggtc ggacccaag aggggactga gggtaacccc ccgcacccc caccaccatt 960
39 cccatcccc aacaccaacc ccacccccat cccccaacac caaacccacc accatcgctc 1020
40 aacatcaac ggcaccccca aaccccgatt cccatcccca cccatcctgg cagaatcgga 1080
41 gctttgcccc tgcaatcaac ccacggaagc tccgggaatg gcggccaagc acgcggatcc 1140
42 tgacgttcac atctgtggct caggggaggga agggggtcgg tatcgtgagt acggcctttg 1200
43 ggaagcagag gatgggcccc agccctcct ggaagataat ggagtccgga gggctccag 1260
44 catgccagga caggggcccc aagtaccct gtctcaaact gagccacctt ttcattcggc 1320

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| | | | | | | | |
|----|---------------------|-----------------|---|-------------|-------------|------------|------|
| 45 | cgcggaatc | ctagggatac | agaccactt | cagcagggag | ttggagccca | gccctgcgag | 1380 |
| 46 | gagtcaaggg | gaggaagaag | agggaggact | gaggggacct | tggagtccag | atcagtggca | 1440 |
| 47 | accttgggct | gggggatacct | gggcacagtg | gcctaattgtg | ccccatgtct | attgcgactt | 1500 |
| 48 | caggggtgaca | gatttgcggg | ctgtggtctg | aggagtggca | cttcaggtca | gcagagggag | 1560 |
| 49 | gaatcccagg | atctgccgga | cccaagggtg | gcccccttta | tgaggactgg | ggataccccc | 1620 |
| 50 | ggcccagaaa | gaagggatgc | cacagagtct | ggctgtccct | tattcttagc | tctaagggaa | 1680 |
| 51 | ccggatcaga | gatagctcca | attggcaatc | tcatttgtac | cacaggcagg | aggttgggga | 1740 |
| 52 | accctcaggg | agataagggtg | ttggtgtaaa | gaggagctgt | ctgctcattt | caggggggtg | 1800 |
| 53 | ggggttgagg | aagggcagtc | cccggcagga | gtaaagatga | gtaaccacac | ggaggccatc | 1860 |
| 54 | agaagcctca | ccctagaacc | aaaggggtca | gccctggaca | acctacctgg | gagtgcagag | 1920 |
| 55 | atgtggctcc | tcctcacttc | tgtttccaga | tctcagggag | ttgaggtcct | tttcttcaga | 1980 |
| 56 | gggtgactca | ggtcaacaca | ggggccccc | tgtagtcgac | agacacagtg | gtcctaagat | 2040 |
| 57 | ctaccaagca | tccaggtgag | aagcctgagg | taggattgag | ggtacccctg | ggccagaacg | 2100 |
| 58 | ctgacagagg | gcccacaga | aatctgccct | gcccctgcta | ttccctcaga | gagcctgggg | 2160 |
| 59 | caaggctacc | tgctgaggtc | cctccattat | cctgggatct | ttgatgtcag | ggaaagggag | 2220 |
| 60 | gccttgggtct | gaaggggctg | cactcaggtc | actagacgga | ggttctcagg | ccctagcagg | 2280 |
| 61 | agtagtggtg | aggaccaagc | aggctcgtca | cccaggacac | ctggactcca | atgaatttgg | 2340 |
| 62 | acatctctca | ttgtcctttg | tgggaggatc | tggttatgta | tggccagatg | ttggtcccct | 2400 |
| 63 | catatccttc | tgtaccgtat | cagggatgtg | aattcttgcc | atgagagttt | ctttggccag | 2460 |
| 64 | caaaagggcg | gtattaggcc | ctgcaaggag | aaaggtgagg | gccctgagtg | agcacagaag | 2520 |
| 65 | gaccctccac | cccagtagag | tggggacctc | acagagtctg | gccgaccctc | ctgacaattt | 2580 |
| 66 | tgggaatctg | tggctgtact | tgcagtctgc | accctgaggc | ccatggattc | ctctcctagg | 2640 |
| 67 | aatcaggagt | tccaagaaca | aggcagtgag | gccttgggtct | gaggcagtg | cctgaggtca | 2700 |
| 68 | cagagcagag | ggggtgcaga | cagtgcgaac | actgaagggt | tgccttgaat | gcacaccaag | 2760 |
| 69 | cgcaccggcc | ccagaacaca | tggactccag | agggcctggc | ctcaccctcc | ctactgtcat | 2820 |
| 70 | tccttcagcc | tcagcatgtg | ctggccggct | gtaccctgag | gcgccctctc | acttgttcc | 2880 |
| 71 | tcaggttctg | aggagacagg | ccccggagca | gcactagctc | ctgcccacac | tcctacctgc | 2940 |
| 72 | tgccctgacc | agagtcac | atg cca ctt | gag cag agg | agt cag cac | tgc aag | 2992 |
| 73 | | | Met Pro Leu Glu Gln Arg Ser Gln His Cys Lys | | | | |
| 74 | | | 1 | 5 | | 10 | |
| 75 | cct gag gaa ggc ctt | gag gcc caa gga | gag gcc ctg ggc | ttg ggt | | | 3040 |
| 76 | Pro Glu Glu Gly Leu | Glu Ala Gln Gly | Glu Ala Leu Gly | Leu Val Gly | | | |
| 77 | | 15 | 20 | 25 | | | |
| 78 | gcg cag gct cct gct | act gag gag cag | gag act gcc tcc | tcc tct | | | 3088 |
| 79 | Ala Gln Ala Pro Ala | Thr Glu Glu Gln | Glu Thr Ala Ser | Ser Ser Ser | | | |
| 80 | | 30 | 35 | 40 | | | |
| 81 | act cta gtg gaa gtc | acc ctg cgg gag | gtg cct gct gcc | gag tca cca | | | 3136 |
| 82 | Thr Leu Val Glu Val | Thr Leu Arg Glu | Val Pro Ala Ala | Glu Ser Pro | | | |
| 83 | | 45 | 50 | 55 | | | |
| 84 | agt cct ccc cac agt | cct cag gga gcc | tcc acc ctc ccc | act acc atc | | | 3184 |
| 85 | Ser Pro Pro His Ser | Pro Gln Gly Ala | Ser Thr Leu Pro | Thr Thr Ile | | | |
| 86 | | 60 | 65 | 70 | 75 | | |
| 87 | aac tat act ctc tgg | agt caa tcc gat | gag ggc tcc agc | aac gaa gaa | | | 3232 |
| 88 | Asn Tyr Thr Leu Trp | Ser Gln Ser Asp | Glu Gly Ser Ser | Asn Glu Glu | | | |
| 89 | | 80 | 85 | 90 | | | |
| 90 | cag gaa ggg cca agc | acc ttt cct gac | ctg gag acg agc | ttc caa gta | | | 3280 |
| 91 | Gln Glu Gly Pro Ser | Thr Phe Pro Asp | Leu Glu Thr Ser | Phe Gln Val | | | |
| 92 | | 95 | 100 | 105 | | | |
| 93 | gca ctc agt agg aag | atg gct gag ttg | gtt cat ttt ctg | ctc ctc aag | | | 3328 |
| 94 | Ala Leu Ser Arg Lys | Met Ala Glu Leu | Val His Phe Leu | Leu Leu Lys | | | |

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/692,401

DATE: 11/07/2000

TIME: 17:55:30

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95          110          115          120
96  tat cga gcc agg gag cca ttc aca aag gca gaa atg ctg ggg agt gtc      3376
97  Tyr Arg Ala Arg Glu Pro Phe Thr Lys Ala Glu Met Leu Gly Ser Val
98          125          130          135
99  atc aga aat ttc cag gac ttc ttt cct gtg atc ttc agc aaa gcc tcc      3424
100 Ile Arg Asn Phe Gln Asp Phe Phe Pro Val Ile Phe Ser Lys Ala Ser
101 140          145          150          155
102 gag tac ttg cag ctg gtc ttt ggc atc gag gtg gtg gaa gtg gtc cgc      3472
103 Glu Tyr Leu Gln Leu Val Phe Gly Ile Glu Val Val Glu Val Val Arg
104          160          165          170
105 atc ggc cac ttg tac atc ctt gtc acc tgc ctg ggc ctc tcc tac gct      3520
106 Ile Gly His Leu Tyr Ile Leu Val Thr Cys Leu Gly Leu Ser Tyr Ala
107          175          180          185
108 ggc ctg ctg ggc gac aat cag atc gtg ccc aag aca ggc ctc ctg ata      3568
109 Gly Leu Leu Gly Asp Asn Gln Ile Val Pro Lys Thr Gly Leu Leu Ile
110          190          195          200
111 atc gtc ctg gcc ata atc gca aaa gag ggc gac tgt gcc cct gag gag      3616
112 Ile Val Leu Ala Ile Ile Ala Lys Glu Gly Asp Cys Ala Pro Glu Glu
113          205          210          215
114 aaa atc tgg gag gag ctg agt gtg ttg gag gca tct gat ggg agg gag      3664
115 Lys Ile Trp Glu Glu Leu Ser Val Leu Glu Ala Ser Asp Gly Arg Glu
116          220          225          230          235
117 gac agt gtc ttt gcg cat ccc agg aag ctg ctc acc caa gat ttg gtg      3712
118 Asp Ser Val Phe Ala His Pro Arg Lys Leu Thr Gln Asp Leu Val
119          240          245          250
120 cag gaa aac tac ctg gag tac cgg cag gtc ccc ggc agt gat cct gca      3760
121 Gln Glu Asn Tyr Leu Glu Tyr Arg Gln Val Pro Gly Ser Asp Pro Ala
122          255          260          265
123 tgc tac gag ttc ctg tgg ggt cca agg gcc ctc gtt gaa acc agc tat      3808
124 Cys Tyr Glu Phe Leu Trp Gly Pro Arg Ala Leu Val Glu Thr Ser Tyr
125          270          275          280
126 gtg aaa gtc ctg cac cat ttg cta aag atc agt gga ggg cct cac att      3856
127 Val Lys Val Leu His His Leu Leu Lys Ile Ser Gly Gly Pro His Ile
128          285          290          295
129 ccc tac cca ccc ctg cat gaa tgg gct ttt aga gag ggg gaa gag tga      3904
130 Pro Tyr Pro Pro Leu His Glu Trp Ala Phe Arg Glu Gly Glu Glu
131          300          305          310
132 gtctgagcac gagttgcagc cagggccagt gggagggagt ctgggccagt gcaccttcca      3964
133 aggccctatc cattagtttc cactgcctcg tgtgacatga ggcccattct tcactctttg      4024
134 aagagagcag tcagtattgt tagtagtgag tttctgttct attggatgac tttgagattt      4084
135 atctttgttt cctgttggaa ttgttcaa atgttctttta acggatgggt gaatgaactt      4144
136 cagcatccaa gtttatgaat gacagtagtc acacatagtg ctgtttatat agtttaggag      4204
137 taagagtgtt gttttttatt cagatttggg aaatccattc cattttgtga attgtgacaa      4264
138 ataacagcag tggaaaaagt atgtgcttag aattgtgaaa gaattagcag taaaatacat      4324
139 gagataaaga cctcaagaag ttaaaagata cttaattctt gccttatacc tcacttcatt      4384
140 ctgtaaattt gaaaaaaaag cgtggatacc tggatatacct tggcttcttt gagaatttaa      4444
141 gagaaattaa atctgaataa ataattcttc ctgttcactg gctcatttat tttccattca      4504
142 ctcagcatct gctctgtgg      4523
143 <210> SEQ ID NO 2
144 <211> LENGTH: 314

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Input Set: I692401.RAW

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145 <212> TYPE: PRT
146 <213> ORGANISM: Homo sapiens
147 <400> SEQUENCE: 2
148 Met Pro Leu Glu Gln Arg Ser Gln His Cys Lys Pro Glu Glu Gly Leu
149 1 5 10 15
150 Glu Ala Gln Gly Glu Ala Leu Gly Leu Val Gly Ala Gln Ala Pro Ala
151 20 25 30
152 Thr Glu Glu Gln Glu Thr Ala Ser Ser Ser Ser Thr Leu Val Glu Val
153 35 40 45
154 Thr Leu Arg Glu Val Pro Ala Ala Glu Ser Pro Ser Pro Pro His Ser
155 50 55 60
156 Pro Gln Gly Ala Ser Thr Leu Pro Thr Thr Ile Asn Tyr Thr Leu Trp
157 65 70 75 80
158 Ser Gln Ser Asp Glu Gly Ser Ser Asn Glu Glu Gln Glu Gly Pro Ser
159 85 90 95
160 Thr Phe Pro Asp Leu Glu Thr Ser Phe Gln Val Ala Leu Ser Arg Lys
161 100 105 110
162 Met Ala Glu Leu Val His Phe Leu Leu Lys Tyr Arg Ala Arg Glu
163 115 120 125
164 Pro Phe Thr Lys Ala Glu Met Leu Gly Ser Val Ile Arg Asn Phe Gln
165 130 135 140
166 Asp Phe Phe Pro Val Ile Phe Ser Lys Ala Ser Glu Tyr Leu Gln Leu
167 145 150 155 160
168 Val Phe Gly Ile Glu Val Val Glu Val Val Arg Ile Gly His Leu Tyr
169 165 170 175
170 Ile Leu Val Thr Cys Leu Gly Leu Ser Tyr Ala Gly Leu Leu Gly Asp
171 180 185 190
172 Asn Gln Ile Val Pro Lys Thr Gly Leu Leu Ile Ile Val Leu Ala Ile
173 195 200 205
174 Ile Ala Lys Glu Gly Asp Cys Ala Pro Glu Glu Lys Ile Trp Glu Glu
175 210 215 220
176 Leu Ser Val Leu Glu Ala Ser Asp Gly Arg Glu Asp Ser Val Phe Ala
177 225 230 235 240
178 His Pro Arg Lys Leu Thr Gln Asp Leu Val Gln Glu Asn Tyr Leu
179 245 250 255
180 Glu Tyr Arg Gln Val Pro Gly Ser Asp Pro Ala Cys Tyr Glu Phe Leu
181 260 265 270
182 Trp Gly Pro Arg Ala Leu Val Glu Thr Ser Tyr Val Lys Val Leu His
183 275 280 285
184 His Leu Leu Lys Ile Ser Gly Gly Pro His Ile Pro Tyr Pro Pro Leu
185 290 295 300
186 His Glu Trp Ala Phe Arg Glu Gly Glu Glu
187 305 310
188 <210> SEQ ID NO 3
189 <211> LENGTH: 9
190 <212> TYPE: PRT
191 <213> ORGANISM: Homo sapiens
192 <400> SEQUENCE: 3
193 Glu Val Val Arg Ile Gly His Leu Tyr
194 1 5

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Input Set: I692401.RAW

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195 <210> SEQ ID NO 4
196 <211> LENGTH: 9
197 <212> TYPE: PRT
198 <213> ORGANISM: Homo sapiens
199 <400> SEQUENCE: 4
200     Val Arg Ile Gly His Leu Tyr Ile Leu
201         1             5
202 <210> SEQ ID NO 5
203 <211> LENGTH: 10
204 <212> TYPE: PRT
205 <213> ORGANISM: Homo sapiens
206 <400> SEQUENCE: 5
207     Val Val Arg Ile Gly His Leu Tyr Ile Leu
208         1             5             10
209 <210> SEQ ID NO 6
210 <211> LENGTH: 8
211 <212> TYPE: PRT
212 <213> ORGANISM: Homo sapiens
213 <400> SEQUENCE: 6
214     Arg Ile Gly His Leu Tyr Ile Leu
215         1             5
216 <210> SEQ ID NO 7
217 <211> LENGTH: 24
218 <212> TYPE: DNA
219 <213> ORGANISM: Homo sapiens
220 <400> SEQUENCE: 7
221     ggggtccaaat tgggtggcttt cact
222 <210> SEQ ID NO 8
223 <211> LENGTH: 22
224 <212> TYPE: DNA
225 <213> ORGANISM: Homo sapiens
226 <400> SEQUENCE: 8
227     gaagaatgcc tcatgatccc ca
228 <210> SEQ ID NO 9
229 <211> LENGTH: 9
230 <212> TYPE: PRT
231 <213> ORGANISM: Homo sapiens
232 <400> SEQUENCE: 9
233     Glu Ala Asp Pro Thr Gly His Ser Tyr
234         1             5
235 <210> SEQ ID NO 10
236 <211> LENGTH: 9
237 <212> TYPE: PRT
238 <213> ORGANISM: Homo sapiens
239 <400> SEQUENCE: 10
240     Ser Ala Tyr Gly Glu Pro Arg Lys Leu
241         1             5
242 <210> SEQ ID NO 11
243 <211> LENGTH: 9
244 <212> TYPE: PRT
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Input Set: I692401.RAW

Line ? Error/Warning

Original Text
